

CLAIM AMENDMENTS

Please cancel claims 2, 3 and 12.

Please amend claims 1, 4, 8, 9 and 10 as set out below:

1 (currently amended). A combiner for use in a spatial diversity radio receiver which receives multiple data signals through spaced apart antennae, said combiner comprising, for two received data signals:

- (a) means for receiving two strength-indicative signals, each said strength-indicative signal being indicative of ~~the~~ a strength of one of said two received data signals, and two demodulated data signals for each said two received data signals;
- (b) means for generating control signals responsive to said strength-indicative signals; and,
- (c) means for combining said demodulated data signals in specific linear proportions determined by said control signals ~~those of said demodulated data signals which are both where said demodulated data signals are~~ above a predetermined combiner threshold and differ in strength by less than a predetermined margin, to provide a combined output data signal, said specific proportions being:
 - (i) where a difference between strengths of said demodulated data signals is more than a predetermined margin:
100% of only a strongest of said demodulated data signals; and,
 - (ii) where said difference between strengths of said demodulated data signals is less than said predetermined margin:
for said demodulated data signal which is a strongest of said demodulated data signals, 50% plus a second percentage corresponding to a ratio between one-half of said difference between strengths and said predetermined margin; and,

for said other demodulated data signal, 50% less said second percentage.

2 (cancelled).

3 (cancelled).

4 (currently amended). A combiner according to claim 1 3, wherein said margin is between 3dB and 12 dB.

5 (original). A combiner according to claim 4, wherein said margin is 6dB.

6 (original). A combiner according to Claim 5, wherein said generating and combining means are provided by a digital signal processor.

7 (original). A combiner according to claim 6, wherein said generating means comprises means for evaluating said strength-indicative signals.

8 (currently amended). A combiner according to claim 7, wherein said evaluating means comprises means for producing a second derivative signal for each said strength-indicative signal and said control signal is said signals are generated according to a predetermined combination of said strength-indicative signals and second derivative signals.

9 (currently amended, second time). A combiner according to claim 7, and further comprising DC bias compensation means for adjusting the relative DC levels of the received demodulated data signals wherein said compensation means calibrates the a level of a DC offset signal used for said adjusting when the strengths of said demodulated data signals are above a predetermined DC bias compensation threshold.

10 (currently amended). A combiner for use in a spatial diversity radio receiver which receives multiple data signals through spaced apart antennae, said combiner comprising, for two received data signals:

- (a) a receiving component configured for receiving strength-indicative signals, each of two said strength-indicative signal being indicative of ~~the~~ a strength of one of said two received data signals, and a demodulated data signals signal for each said two received data signals;
- (b) a control signal generating component configured for generating control signals responsive to said strength-indicative signals; and,
- (c) a combining component configured for combining said demodulated data signals in specific linear proportions determined by said control signals ~~those of said demodulated data signals which are both where said demodulated data signals are above a predetermined combiner threshold and differ in strength by less than a predetermined margin~~, to provide a combined output data signal, said specific proportions being:
 - (i) where a difference between strengths of said demodulated data signals is more than a predetermined margin:
100% of only a strongest of said demodulated data signals; and,
 - (ii) where said difference between strengths of said demodulated data signals is less than said predetermined margin:
for said demodulated data signal which is a strongest of said demodulated data signals, 50% plus a second percentage corresponding to a ratio between one-half of said difference between strengths and said predetermined margin; and,

for said other demodulated data signal, 50% less said second percentage.

11 (original). A spatial diversity radio receiver comprising: (a) multiple receiving components for receiving data signals through antennae, each said antenna associated with one said receiving component and being spaced apart a predetermined distance, each said receiving component comprising circuitry for providing a signal indicative of the strength of said received data signal and a demodulated data signal; (b) a combiner according to claim 1; and, (c) circuitry for evaluating said combined output data signal.

12 (cancelled).

13. (original). A spatial diversity radio receiver comprising: (a) multiple receiving components for receiving data signals through antennae, each said antenna associated with one said receiving component and being spaced apart a predetermined distance, each said receiving component comprising circuitry for providing a signal indicative of the strength of said received data signal and a demodulated data signal; (b) a combiner according to claim 4; and, (c) circuitry for evaluating said combined output data signal.

14.(original) A spatial diversity radio receiver comprising: (a) multiple receiving components for receiving data signals through antennae, each said antenna associated with one said receiving component and being spaced apart a predetermined distance, each said receiving component comprising circuitry for providing a signal indicative of the strength of said received data signal and a demodulated data signal; (b) a combiner according to claim 8; and, (c) circuitry for evaluating said combined output data signal.

15. (original) A spatial diversity radio receiver comprising: (a) multiple receiving components for receiving data signals through antennae, each said antenna associated with one said receiving component and being spaced apart a predetermined distance, each said receiving component comprising circuitry for providing a signal indicative of the strength of said received data signal and a demodulated data signal; (b) a combiner

according to claim 9; and, (c) circuitry for evaluating said combined output data signal.

16. (original) A spatial diversity radio receiver comprising: (a) multiple receiving components for receiving data signals through antennae, each said antenna associated with one said receiving component and being spaced apart a predetermined distance, each said receiving component comprising circuitry for providing a signal indicative of the strength of said received data signal and a demodulated data signal; (b) a combiner according to claim 10; and, (c) circuitry for evaluating said combined output data signal.